PROJECT DESCRIPTION GENERAL THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 1 AND MOUNT VISTA ROAD IN BALTIMORE COUNTY. U.S. 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION. INTERSECTION OPERATION THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND U.S. 1 APPROACH DURING PM PEAK PERIOD. THE EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING WILL OPERATE AS A LEADING LEFT-TURN CONTROLLER REQUIREMENTS THE EXISTING POLE MOUTNED CABINET AND CONTROLLER WILL BE USED. THE DETECTOR RACK SHALL RETRO-FITTED WITH TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS HOUSED IN THE POLE MOUNTED CABINET. MAINTENANCE OF TRAFFIC THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. STANDARD NO. MD-104.00 - 104.00-30 STANDARD NO. MD-104.37-01 (LEFT LANE CLOSURE) STANDARD NO. MD-104.38-01 (RIGHT LANE CLOSURE) STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT STANDARD NO. MD-104.43-01 (SHOULDER WORK) PROJECT CONTACTS THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS: MR. SUENETTE POPE DISTRICT UTILITY ENGINEER PHONE: (410) 321-2841 MR. RANDALL SCOTT ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (410) 321-2780 MR. RICHARD L. DAFF, SR. CHIEF. TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630 MR. STEVE MARCISZEWSKI ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (410) 321-2761 WIRING DIAGRAM --DISCONNECT EXISTING ELECTRICAL CABLE FROM SIGNAL HEAD AND CONNECT TO NEW SIGNAL HEAD

WIRING KEY

A 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

B 2-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 A.W.G.)

LW - LOOP WIRE (NO. 14 A.W.G.)

EQUIPMENT LIST "A"

SHEET ALUMINUM SIGNS TO CONSIST OF :

- 1 EACH R10-12 SIGN (36 IN. x 42 IN.) - SPAN MOUNT

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO. QUANTITY

9016

2 EACH

FOUR-CHANNEL, TIME-DELAY-OUTPUT, AMPLIFIER

1 EACH

DETECTOR RACK RETRO-FIT

11 S.F.

9572

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

PHASE CHART

NORMAL OPERATION

1	2	3	4	5	6	7	8	9	10	11	
(R)	R	(R)	(R)	R	R	(R)	(R)	R	R	R	
(Y)	Y	(4Y-) Y)	(Y)	Y	Y	(Y)	(Y)	Y	Y	Y	
(G)	G	(4G-) G	(G)	G	G	(G)	(G)	G	G	G	

PHASE 2 + 6	G	G	G	G	G	G	G	R	R	R	R	
2 + 6 CHANGE	Y	Y	Y	Υ	Y	Y	Y	R	R	R	R	T
PHASE 4 + 8	R	R	R	R	R	R	R	G	G	G	G	
4 + 8 CHANGE	R	R	R	R	R	R	R	Υ	Y	Y	Y	
FLASHING OPERATION	FL/Y	FL/R	FL/R	FL/R	FL/R							

PM PEAK OPERATION

	G	(b)	₫G G	G	G	G	G	G	G	G	G	
PHASE I + 6	G	- G	G — G —	G	R	R	R	R	R	R	R	
1 + 6 CHANGE	G	G ←Y—	G ← Y —	G	R	R	R	R	R	R	R	
PHASE 2 + 6	G	G	G	G	G	G	G	R	R	R	R	<u> </u>
2 + 6 CHANGE	Y	Υ	Y	Y	Y	Υ	Y	R	R	R	R	—
PHASE 4 + 8	R	R	R	R	R	R	R	G	G	G	G	
4 + 8 CHANGE	R	R	R	R	R	R	R	Υ	Y	Y	Y	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	+ + + + + + + + + +

EQUIPMENT LIST "B"

B. EQU	JIPMENT TO BE FURNISHED AND/O	R INSTALLED BY THE CONTRACTOR
ITEM NO	OUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
8013	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8034	10 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
8043	11 S.F.	INSTALL OVERHEAD SIGN
8052	3 EACH	FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8053	7 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8055	230 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G) ALUMINUM SHIELDED
8059	25 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8060	460 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8061	120 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8065	110 L.F.	STEEL SPAN WIRE - 1/4 IN. DIAMETER

Whitman, Requardt

Whitman, Requardt and Associates, LLP 801 South Caroline Street Baltimore; Maryland 21231 (410) 235-3450 MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
U.S. 1 (BELAIR RD.) AND MOUNT VISTA ROAD